THE FINANCING CRUNCH AND THE MACROPRUDENTIAL IN INDONESIA

Sugianto
Lecturer at Islamic Economics and Business Faculty UIN SU
Email: sugianfa@gmail.com

A. Interoduction

The financial system has an important role in the implementation of intermediation (including financing in the real sector), payment systems, wealth management, as well as have a role in the transmission of monetary policy. If the financial system is compromised, such as the global financial crisis, it will have an impact on the financial stability of a country. Furthermore, it will affect the whole structure of the economic system that resulted in the collapse of the economy of a country.

The macroprudential policy is a major component in maintaining the stability of the financial system. The macroprudential policy is part of the main policies defined and implemented by Bank of Indonesia to prevent and reduce systemic risk, encourage intermediation balance for the economy, and to improve access and efficiency of the financial system in order to maintain the stability of the financial system, and to support monetary stability and stability payment system.

The factors that lead to slow lending and financing, it can be seen from supply factors due to the reluctance of banks to lend and banks became more risk averse (hypothesis credit crunch) or can be seen from the low demand for credit and financing as a result of the economy that are less prospective and consolidation internal (balance sheet adjustment). At the macro level, the credit crunch and financing crunch will obviously hamper the process of economic growth as a source of financing the business is highly dependent on credit and financing. If the credit crunch and financing crunch continues it may provide a second round effect on the business failure, which eventually returned worsen the quality of bank loans and the risk of recurrence of the financial crisis. For the sake of monetary control, the credit crunch and financing crunch has implications for the effectiveness of monetary control and how monetary policy is directed to these problems are not exacerbated (Court et al, 2001: 1-2).

Credit crunch and financing crunch has very important implications for monetary policy, the implications for the effectiveness of monetary policy is mainly due to the blocking of the transmission path of monetary variables to economic activity. Low desire banks to extend credit primarily triggered by factors such as adverse selection, the risk of the business world, lack of bank capital caused interest rates, profit margins or the result is not a measure used by banks to extend credit to a debtor.

This paper intends to discuss Islamic banking financing crunch, its causes and its implications on macroprudential policy and vice versa.

B. The Macroprudential Policy

The macroprudential policy is part of the main policies defined and implemented by Bank of Indonesia to prevent and reduce systemic risk, encourage intermediation balance for the economy, and to improve access and efficiency of the financial system in order to maintain the stability of the financial system, and to support monetary stability and stability payment system. Risk Systemic referred to above is the potential disruption of all or part of the financial system that arise because of the contagion due to the linkage (interconnectedness) between institutions and/or financial markets and the tendency of the behavior of financial institutions to follow the economic cycle, which can pose a threat to the national economy. While the Financial System Stability (or in Indonesia is Stabilitas Sistem Keuangan/SSK) is a condition in which financial institutions and financial markets function effectively and efficiently and be able to withstand internal and external vulnerability so that the allocation of funding or financing sources can contribute in supporting sustainable economic growth. (Bank Indonesia, 2014)

According to Clement (2010), the origin of the term "*macroprudential*" in the late 1970s from the minutes of meeting of the Cooke Committee in Basel Committee on Banking Supervision and a document prepared by Bank of England. The term generally denoted a systemic oreintation of regulation and supervision linked to the macroeconomy (see Borio, 2009). In 1986 BIS discussed it as a policy aimed at supporting "the safety and soundness of the financial system as a whole, as well as payments mechanism", like George Blunden’s

speech how a systemic view could imply curbing banking practices that would appear to be prudent from an individual bank's perspective (Blunden, 1987).

In the early 2000s, the notion of a macroprudential approach to regulation and supervision received new impetus. The use of term macroprudential became much more common in the current financial crisis and discuss macroprudential policy in detail (e.g. Crockett, 2000; Shirakawa, 2009; Nijathaworn 2009; Tumpel-Gugerell 2009; Bini Smaghi-2009; Kohn, 2009; and Brouwer, 2010).

Over the past two decades and until the crisis erupted, the literature on monetary policy has seen a broad convergence of views on the policy objective (See e.g. Borio et al, 2003; Orphanides and Williams, 2010). The literature on macroprudential policy is still far from such a consensus on its objectives. Broadly speaking, macroprudential policy is seen as aiming at financial stability but there is no commonly shared definition of financial stability. The different views can be broadly assigned to two groups. The first defines financial stability in terms of robustness of the financial system to external shocks (e.g. Allen and Wood, 2006; Padoa-Schioppa, 2003). The second emphasizes the endogenous nature of financial distress and describes financial stability in terms of resilience to shocks originating within the financial system (e.g. Schinasi, 2004) or the vulnerability to financial distress in response to normal-sized shocks rather than large shocks (Borio and Drehman, 2009a).

An alternative view defined the goal of macroprudential policy as limiting the risk of episodes of system-wide distress that have significant macroeconomic costs (Borio and Drehmann, 2009a). A useful starting point in understanding the nature of macroprudential policy according to this view is the distinction between the macro- and the microprudential perspectives to regulation (Crockett, 2000).

Differences between microprudential and macroprudential can be identified as follows:

1. If microprudential more directed to the analysis of the development of individual financial institutions. Macroprudential more directed to the analysis of the overall financial system as a collection of individual financial institutions. The failure of macroeconomic policy, regulatory failures and market failures that led to the crisis pushed the need for macroprudential policy.

2. In line with Borio (2009), the macroprudential policy will focus on:
    a. Policies overall financial system;
    b. Risks in the aggregate, for example relating to changes in the behavior of financial institutions collectively. (Bank Indonesia, 2014)

Furthermore, differences in general can be seen in Table 1.

Table. 1. Macro- versus microprudential perspectives

Element	Macroprudential	Microprudential
Proximate objective limit	limit financial system-wide distress limit distress of individual institutions	limit distress of individual institutions
Ultimate objective	avoid macroeconomic costs linked to financial instability	consumer (investor/depositor) protection
Characterisation of Risk	"endogenous" (dependent on collective behavior)	"endogenous" (dependent on collective behavior)
Correlations and common exposures across institutions	Important	Irrelevant
Calibration of prudential controls	in terms of system-wide risk; topdown	in terms of risks of individual institutions; bottom-up
Focus	Systemic financial institutions (systemivally important financial institution/SIFIs)	individual financial institutions

Source: Borio (2003) and Bank Indonesia (2014)

C. The Implementation of Macroprudential Policy in Indonesia

The implementation of macroprudential policy in Indonesia are:[1]

1. *Loan to Value Ratio* (LTV) for mortgage policies (KPR) and *Down Payment* (DP) for KKB

LTV for mortgage and DP for vihicle loans (KKB) policies conducted with the issuance of SE BI No.14 / 10 / DPNP on 15 March 2012 for a conventional bank and

[1]Penjelasan berikut berdasarkan Bank Indonesia, FGD Kebijakan Makroprudensial dan Stabilitas Sistem Keuangan, 2014

SE BI No.14/33/DPbS on 27 November 2012 for an Islamic commercial bank. Recalibration with SE BI No.15/40/DKMP 24 September 2013.

LTV and DP policy objectives are to curb systemic risk that may arise as a result of the growth of the mortgage (KPR) at the time it reaches more than 40%, and the level of customer KKB failure to fulfill obligations when it reached almost 10%. Growth in mortgages (KPR) that are too high may encourage an increase in the price of property assets that do not reflect actual prices (bubble), so as to increase the credit risk for banks with large exposure to property loans.

Principal provisions of the rules above are progressive LTV for mortgage (KPR) and 20% - 30% DP for KKB, as can be seen in Table 2.

2. Statutory Reserves (Giro Wajib Minimum/GWM) based on *Loan to Deposits Ratio* (LDR)

This GWM policy is outlined in PBI No.12/19/PBI/2010 dated October 4, 2010, amended by PBI No. 15/7/PBI/2013 dated September 26, 2013, and SE BI No.15/41/DKMP October 1, 2013. This GWM provisions is to increase the resilience of the banking sector in the face of risk, particularly related to credit risk and liquidity. So it can support the stability of the financial system at the same time monetary stability by strengthening the role of the intermediary bank.

Tabel 2. LTV KPR Provisions

Credit/Financing*) & Collateral Type	FK/FP 1	FK/FP 2	FK/FP 3 etc
KPR Type > 70	70%	60%	50%
KPRS Type > 70	70%	60%	50%
KPR Type 22 - 70	-	70%	60%
KPRS Type 22 - 70	80%	70%	60%
KPRS Type untill 21	-	70%	60%
KPRuko/KPRukan	-	70%	60%

Financing & Collateral Type (MMQ & IMBT)	FP 1	FP 2	FP 3 etc
KPR Type > 70	80%	70%	60%
KPRS Type > 70	80%	70%	60%
KPR Type 22 - 70	-	80%	70%
KPRS Type 22 - 70	90%	80%	70%
KPRS Type untill 21	-	80%	70%
KPRuko/KPRukan	-	80%	70%

Notes:

*) Especially for financing, only for *murabahah* and *istishna'* financing

FK= credit facility; FP= financing facility

Source: Bank Indonesia, FGD Macroprudential policy and Financial System Stability, 2014.

The principal provisions are:

a. Banks are required to maintain additional GWM rupiah (other than the primary GWM and secondary GWM which is determined based on a certain percentage of total rupiah deposits of banks) whose value is determined based on the number bank's LDR.
b. If the number bank's LDR is within the range of LDR targets, namely 78% - 92% (previously 100%), then the amount of (extra) bank's LDR GWM is 0%.
c. If the bank's LDR <78%, then the amount of (extra) bank's LDR GWM is = (78% - bank LDR) x 0.1% (lower disincentive parameter).
d. If the bank LDR> 92%, then the amount of (extra) bank's LDR GWM is = (LDR bank - 92%) x 0.2% (parameter disincentives) except: banks with CAR> 14%, then the amount of GWM LDR is 0%.

LDR GWM Policy (SE External No. 15/41/DKMP dated October 1, 2013). Obligations secondary GWM which is currently at 2.5% would be raised:

a. To 3% of deposits of bank in Rupiah from 1 - 31 October, 2013.
b. To 3.5% of deposits of bank in Rupiah since 1 November -1 December 2013
c. To 4% of deposits of bank in Rupiah since December 2, 2013.

Adjustments are made to the upper limit of the LDR GWM lowered from 100% to 92%, while the lower limit remains at 78%. Bank is expected to keep their LDR in the range of 78% to 92%.

Disincentives upper limit imposed on banks that have LDR over 92% in the CAR (Capital Adequacy Ratio) of less than 14%, while the lower limit imposed disincentive to banks with LDR less than 78%. The calculation disincentive for violation of the upper limit or lower limit is done with a calculation mechanism established by Bank Indonesia.

3. Transparency Prime Lending Rate (SBDK)

This policy is based on SE BI No.13/5/DPNP on 8 February 2011, amended by SE BI No.15/1/DPNP on 15 January 2013. This policy objectives are:

a. Mitigating credit risk through healthy competition in the banking industry;

b. Improve good governance and competition through better market discipline;
c. Encouraging banks to create formulations lending rates efficiently and accurately;
d. Improve the transparency of banking products and services, particularly related to the calculation of benefits, risks and costs; and
e. Increase customer protection through mitigation asymmetric information between customers and banks.

Prime lending rate (SBDK) provisions are:

a. Banks are required to report to BI and perform routine publication of components to prime lending rate component for each corporate loans, retail, consumption (mortgage and non-mortgage), and micro-credit (through changes SE in 2013).
b. SBDK components that must be reported is the cost of funds for credit (HPDK), overhead cost and profit margins. While the risk premium is not notifiable.

D. *Financing Crunch*

Theoretically financing crunch has not been much discussed. But the credit crunch it has been widely discussed. Therefore, this discussion started from the theory of the credit crunch. The term credit crunch emerged in 1966 as a form of disintermediation phenomenon that happens in America when the monetary policy conducted by the Federal Reserve to be very tight to tackle inflation. A very strict policy that has increased short-term interest rates to rise much above the upper limit of deposit rates set by Regulation Q. As a result, depositors withdrew their funds from banks to get higher interest rates on other financial assets so that bank deposits experienced a greater decline resulting in inhibition of the supply of credit. Since the deregulation of the financial sector in the 1980s that abolished the limit of interest rates on deposits (Regulation Q), the phenomenon of banking disintermediation due to regulations like this do not happen again (Kliesen and Tatom, 1992).

A broader definition is that the credit supply restrictions on non-price (non-price credit constraint) as a result of overly restrictive banking regulations such as regulatory capital issues and legal lending limit; or as a result of the decline in asset quality and profitability of banks (Bank Indonesia, 2001). In more technical terms, Bernanke and Lown (1991) defines credit crunch as a shift in the supply curve of bank loans with interest rate condition and the quality of potential customers has not changed. This definition is in line proposed by Pasarbasioglu (1996), which defines credit crunch as a decline in credit supply due to declining willingness of banks to lend, without being followed by a rise in interest rates on loans. The most strong definition given by Gosh and Gosh (1999) which defines credit crunch as quantity rationing, where the lending rate is no longer functioning in balancing demand and supply of credit. It is linked to the concept of credit rationing put forward by Stiglitz and Weiss (1981) and Jafee and Stiglitz (1990), which define credit rationing as a condition in which certain customer does not get the credit even though they are willing to pay the loan interest rate is higher.

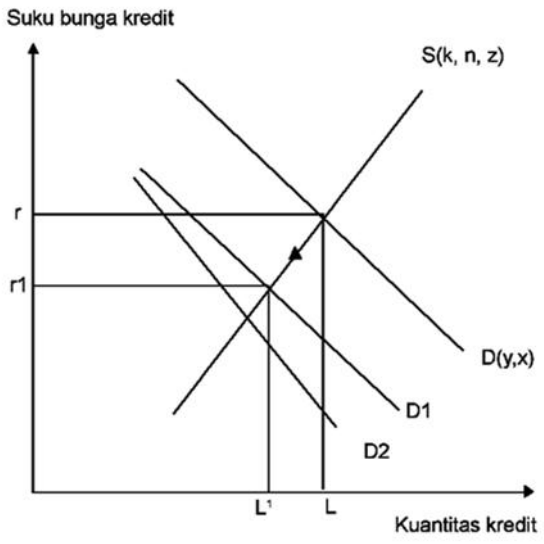
From the various definitions of the above, generally credit crunch can be defined as a situation where the supply of bank credit decreased sharply as a result of a decline in the willingness of banks to extend credit to the business world. Reluctance of banks in lending was reflected in the increased spread is the difference between lending and deposit interest rate and the more strict criteria for obtaining credit. In extreme conditions, the credit crunch occurred in the form of credit rationing, the bank refused to give credit to a particular customer or the majority of customers at any given interest rate (Bank Indonesia, 2001). Credit decline may occur due to a decline in demand or supply on bank credit.

1. Demand Factors

Credit decline caused by demand factors are something very natural to happen during the recession as an ongoing, mainly due to weak investment activity. At the micro

level, structural problems such as the adjustments made by the company to reduce the debt-equity ratio increased due to the crisis may also be one of the factors that can explain why the demand for loans also decreased. Although the decline in demand for loans more often occur as a result of the factors weakening investment during the recession, microeconomic structural factors such as the above are not uncommon in a post-crisis economy (Bank Indonesia, 2001).

As illustrated in Graph 2., a shift in demand for loans due to the weakening of economic activity, if there is no change on the supply side, push down 'price' of the credit is declining interest rates and decreasing credit terms such as the amount of collateral and term. If the credit decline is driven by structural microeconomics factors, credit demand curve shift was also followed by a sharpening of the demand curve; namely credit demand is becoming less sensitive to price changes in credit (Graph 1).



Graph 1. Decrease in Credit Due to Decreased Demand

2. Supply Factors

On the supply side, the decline in credit due to the decrease willingness of banks to provide loans at prevailing interest rates. Factors that may cause a decrease in the

willingness to give loans can be sourced from internal factors and external factors banks. Internal factors such as poor quality of banking assets, the high nonperforming loans and the drop in bank capital due to depreciation and negative interest margin decreases the ability of banks to lend (Bank Indonesia, 2001).

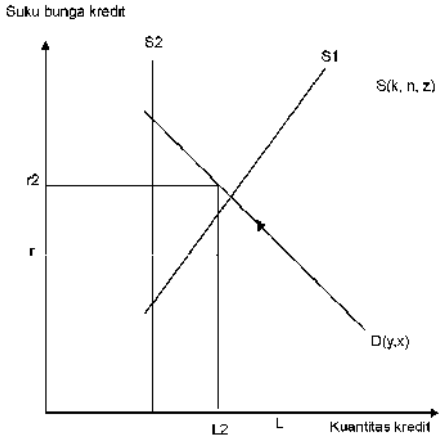
Institutionally, the closure of almost half the number of banks in Indonesia is very influential on the behavior of banks. *First*, the collapse of several banks to reduce the value of the liquidation of all banking institutions thus increasing the bankruptcy costs to be borne by the owner of the bank if the bank is liquidated (Shleifer and Vishny, 1992). This causes the banks that survive will be more conservative (risk averse) in business. *Secondly*, the closure of a number of banks by the government, which at a certain level means the government was ready to close poorly performing banks, have reduced the incentive for banks to act moral hazard through a signal that the government has changed its strategy in dealing with troubled banks. This led banks to rapidly restore the level of health for not exposed to liquidation. Because of the level of health, one of which is measured by the achievement of Capital Adequacy Ratio (CAR), the bank started to adjust its asset portfolio including reducing its credit, to maintain or increase its CAR.

From an external side, especially reduced levels of creditworthiness of the debtor as a result of the weakening of the company's financial condition. In certain situations when a bank is difficult to distinguish creditworthiness of borrowers, the banks will reduce the volume of credit. Non-price credit rationing like this can happen in a variety of forms: some debtors still get credit while other debtors with the same level of credit worthiness may be affected by credit rationing; rationing of credits for certain sectors (eg consumer credit) or certain groups of debtor (small business); or the number of debtors who seem worthy of credit was also rejected because the bank does not have complete information about the financial data of debtors.

Whatever the cause, the decline in credit due to supply factors can be described by shifting the supply curve (Graph 2). Credit decline due to declining supply push up lending rates and tightening credit terms. However, the reluctance of banks to extend credit are often not followed by rising interest rates, but rather in the form of a reduction in the

quantity of credit (non-price credit rationing). This can be understood as a result of deteriorating credit risk of the business world and because of the problem of information that banks cannot distinguish the quality of the debtor. In determining the quality of the debtor, banks need to know where the debtor both have a good financial position with a lower risk, and which bad debtors who have a bad financial position with potential high risk. This issue is exacerbated when the banks experienced a change of management with new ones. Because of the relationship between banks and credit customers are long-term, Long-term relationship reduces the problem of moral hazard (because if customers default they are difficult to get credit in the future) and the issue of information because the bank can study the behavior of its clients from time to time (Bank Indonesia, 2001).

In capital markets, the relationship between shareholders and the company's management short-term nature. Substitution bank management led to their lack of understanding of the debtor credit condition. As a result, banks tend to be more cautious in lending and the interest rate is not a major consideration in providing the credit, because banks perceived that only low-quality customers who are willing to pay the loan interest rate is high (adverse selection problem).



Graph 2. Decrease in Credit due Decrease Loan Supplies

Non-price credit rationing shifts supply curve to the left and be vertical; which means that the credit supply curve at all be not sensitive to changes in interest rates (Chart 2). In practice, the non-price credit rationing often occurs in conjunction with price rationing. Some bank customers, such as small entrepreneurs or new borrowers, affected by quantity rationing, while others are subject to price rationing or both.

Based on the above, financing crunch can be defined as a situation where a decline in the supply of financing Islamic banking sharply as a result of the declining willingness of banks in channeling finance to the business world.

E. Relationship the *Financing Crunch* with Macroprudential Policy

Macroprudential policy applied in order to secure financial stability. While financing crunch clearly gives disturbance to monetary policy even further consequences are resulted in a decline in investment in the real sector. Furthermore, it will slow down the economic turnaround. So the financing crunch should be prevented by macroprudential policy.

Macroprudential policy is part of the main policies defined and implemented by Bank Indonesia to prevent and reduce systemic risk, encourage intermediation balance for the economy sector, and to improve access and efficiency of the financial system in order to maintain the stability of the financial system, and to support monetary stability and payment system stability. Given this policy, the Islamic bank intermediation function will remain intact.

F. Concluding Remarks

Studies and research on the financing crunch need further attention. Given the conditions in recent years. Because the Islamic Bank financing characteristics different from conventional banks, the more in-depth study is needed.

REFFERENCE

Agung, J. Financial Deregulation and Bank lending channel in Developing Countries: The case of Indonesia. *Asian Economic Journal.* Vol. 12, 3. (Sep. 1998): 273-294.

Agung, J. Financial Constraints, Firms' Investment and the Channel of Monetary Policy in Indonesia. *Applied Economics*. (2000).

Bagian SPPK – DKM, Struktur Pembentukan Suku Bunga Dari Sisi Perbankan Untuk Menunjang Efektivitas Kebijakan Moneter, September 2000

Bank Indonesia, FGD Kebijakan Makroprudensial dan Stabilitas Sistem Keuangan, 2014

Bank Indonesia, Credit Crunch di Indonesia Setelah Krisis Fakta, Penyebab dan Implikasi Kebijakan, 2014.

Bernanke, B. and Lown, C. The credit crunch. *Brooking Paper in Economic Activity*. February, 1991.

Bernanke, B., Gertler, M. and Gilchrist, S. The Financial Accelerator and the Flight to Quality. *Review of Economics and Statistics.* Feb. 1996: 1-15.

Ding, W., Domac, I, and Ferri, G. (1998). Is there a Credit Crunch in East Asia? World Bank - Policy Research Working Paper Series, No.1959.

Domac, I, and Ferri, G. The Real Impact of Financial Shocks: Evidence from the Republic of Korea. World Bank - Policy Research Working Paper Series. 1998. No.2010.

Gosh, A. and Gosh, S. East Asia in the Aftermath: Was there a crunch?. IMF Working Paper (1998). 1999/38.

Kim, H.E. Was Credit Channel a Key Monetary Transmission Mechanism following the Recent Financial Crisis in the Republic of Korea? World Bank - Policy Research Working Paper Series, No.3003. (1999).

Kliesen, K.L. and Tatom, J.A. (1992). The Recent Credit Crunch: The Neglected Dimensions. Federal Reserve Bank of St Louis Economic Review. September/ October 1992.

Pazarbasioglu, C. A Credit Crunch? Finland in the Aftermath of the Banking Crisis. IMF Staff Paper, Vol. 44. (1997): 315-27.

Stiglitz, J.E. and Weiss, A. Credit Rationing in Markets with Imperfect Information. The American Economic Review, (Jun, 1981): 393-410.